The Commonwealth of Massachusetts

STATE COLLEGE

at

WORCESTER

1968

SUMMER SESSION

JULY 1, to AUGUST 9, 1968

Program of Continuing Studies

Tel. 791-1405 or 756-5121

FACULTY

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BERNARD GUARINI, A.B., A.M., A.M.
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ABRAM KAMINSKY, B.M.E., M.M.E.
JOSEPH C. LONERGAN, B.S., Ed.M.
WILLIAM K. MASTERSON, A.B., A.M., M.S.
PAUL J. McCARRON, B.S., Ed.M.
BERNARD L. McGOUGH, A.B., Ed.M., M.S.
MELVIN MERKEN, B.S., A.M., Ed.D.
RITA M. L. MORRIS, B.S., Ed.M., Ed.D.
KATHRYN R. O'DONNELL, B.S., A.M.
J. FRANCIS O'MARA, A.B., Ed.M., M.A., Ph.D.
PAUL F. O'NEIL, A.B., Ed.M.
JOSEPH W. RIORDAN, A.B., A.M., Ed.M., Ph.D.
EVELYN ROBINSON, A.B., Ed.M., M.S.
JOSEPH P. SCANNELL, B.S., Ed.M.
HELEN SMITH, A.B., B.S.
G. FLINT TAYLOR, A.B., Ed.M., Ph.D.
FRANCIS G. WALETT, B.S., A.M., Ph.D.

GENERAL INFORMATION

The courses announced in this bulletin are offered by the Division of State Colleges in cooperation with the State College at Worcester. The Division of State Colleges reserves the right to cancel any course which does not have a minimum of 20 enrollments.

Both graduate and undergraduate courses are offered: Courses carrying undergraduate credit only are numbered in the 7- series; courses carrying both graduate and undergraduate credit are numbered in the 8- series; courses carrying graduate credit only are numbered in the 9- series.

REGISTRATION

Registration should be made on May 27th through July 1st from 8:30 A.M. to 4:30 P.M. at the Worcester State College Graduate Office, Room S-112 Science-Laboratory Building. Registration must be made at the above office. No registrations will be accepted by mail. ALL FEES, REGISTRATION AND TUITION, MUST BE PAID AT THE TIME OF REGISTRATION. NO EXCEPTION TO THIS REGULATION WILL BE CONSIDERED. Fees must be paid by check or money order made payable to the State College at Worcester. Cash will not be accepted. Assignment to classes which are or might be sectioned, or assignment to classes with maximum registration, will be made in the order of completed registrations.

1. The Tuition fee for residents of Massachusetts is $18.00 per semester hour of credit; for non-residents, $25.00 per semester hour of credit; for auditors, $11.00 per semester hour.
2. LATE REGISTRATION FEE—(Required for all, including veterans, after the first class meeting) $2.00.
3. Change of course fee—Payable for any change of registration after the first class meeting except when a course is cancelled, $2.00.
4. All students in each semester, including veterans, must pay a $2.50 registration fee per semester when making out the course registration forms. UNDER NO CIRCUMSTANCES WILL ANY OF THE REGISTRATION FEES BE RETURNED.

VETERANS

Any resident of Massachusetts who has served in any branch of the armed services for at least 90 days, one of which must have been served either between September 16, 1940, and December 31, 1946, or between June 25, 1950, and January 31, 1955, and who has a discharge other than dishonorable may enroll without charge for instruction in any course here offered within the established limitation of 120 semester hours. To establish his eligibility the veteran must present his discharge (or photostatic copy) or certificate of satisfactory service in the case of officers, together with proof of residence in advance of the opening date of class meeting.

All veterans who come under the new G.I. Bill must pay their tuition to the college. These veterans who are treated as non-veterans for registration purposes, are to be reimbursed by the Veterans' Administration. *NOTE: If this is your first enrollment, you must contact your Veterans' Administration Office for information on reimbursement. If you have been enrolled in courses at Worcester State College, you, upon completed registration here, will be reenrolled by the Office of Continuing Studies for the veterans' reimbursement.

CREDIT

Regulations and requirements for degree study may be obtained at the Office of the Director of Continuing Studies, State College at Worcester. It is urgently recommended that the guidance and advice of the Director and your faculty advisor in your Area of Concentration, wherein you must have 5 approved courses—effective September 1966—be sought and faithfully followed in planning a program of study. For teachers in service, a maximum of six semester hours of credit per semester may be credited toward a degree.

The GRADUATE RECORD EXAMINATION, REQUIRED for all graduate degree students, will be conducted at Worcester State College on Saturday, July 13, 1968. The Bulletin of information and Application Blanks can be secured at the Director's Office, Room S-112 Science-Laboratory Building, State College at Worcester. Registration through Educational Testing Service, Princeton, New Jersey closes two weeks prior to the test.

The degree of Master of Education is awarded at the State Colleges at Boston, Bridgewater (including Hyannis Summer Session), Fitchburg, Framingham, North Adams, Salem, Westfield, and Worcester. Graduate courses in partial fulfillment of the requirements for this degree may be offered from time to time in the other State Colleges and Massachusetts College of Art.

Students must park in the Student Parking Areas behind the Science-Laboratory Building or the side and rear of the Gymnasium-Library Building.

The Graduate Comprehensive Examination will be conducted on Friday, July 19, 1968 at 2:00 P.M. It is the responsibility of graduate students to signify the intention to graduate. This statement must be submitted to the Directors early in the final semester of graduate work.

Candidates for the Secondary Workshop for Intensive Teacher Preparation should make inquiry about required credentials and interviews as soon as possible.

SCHEDULE OF CLASSES

Courses carrying undergraduate credit only are numbered in the 7-series; courses carrying both undergraduate and graduate credit are numbered in the 8- series; and courses carrying graduate credit only are numbered in the 9- series. Assistance in selection and registering in all courses is available in Room S-112 Science-Laboratory Building, the W.S.C. Office. Phone: Worcester 791-1405 or 756-5121.

ALL COURSES CARRY THREE SEMESTER HOURS OF CREDIT

No.	*Course Title*	*Instructor*	*Room*
FIRST PERIOD BEGINNING AT 8:30 A.M. DAILY			
SS8-75	Curriculum Workshop for Early Childhood Education	Virginia Ball	G-22
SS9-71	Techniques & Production of Instructional Materials	Paul Davis	A-110
SS9-51	Research in Education, Section A	Alfred F. Eddy	S-217
SS9-63	Techniques in Counseling	Leonard F. Farrey	S-225
SS8-477	Social Problems of the School & Community	Robert W. Goss	S-314
SS9-87	Supervision in Today's Schools	Ruth Griffiths	S-226
SS8-873	Animal World and Its Evolution	Paul A. Holle	S-132
SS8-153	Books & Related Materials for Jr. & Sr. High School	William D. Joyce	G-24
SS8-82	Teaching Music in the Elementary Schools	Abram Kaminsky	S-123
SS8-775	Introduction to Philosophical Foundations of Education, Section A	William K. Masterson	S-231
SS8-179	The World in the Field of the Short Story	Kathryn R. O'Donnell	G-23
SS9-81	Teaching Enriched Language Arts Units in Elementary Grades	Paul F. O'Neil	S-214
SS9-60	Laboratory Practicum in Remedial & Corrective Reading at the Elementary Level Time: 8:30-11:10 A.M. 6 SH	J. Francis O'Mara	S-224
SS8-777	Advanced Philosophical Foundations of Education, Section A	Joseph W. Riordan	S-212
SS8-576	Mathematics for Junior High School Teachers	Evelyn Robinson	S-227
SS8-656	The American Revolution & Early National Period 1775-1829	Francis G. Walett	A-315
SECOND PERIOD BEGINNING AT 9:55 A.M. DAILY			
SS8-78	Special Problems of the School Beginner	Virginia Ball	G-22
SS8-263	Painting as a Creative Expression	Jacqueline G. Casale	A-205
SS9-67	Practicum in Counseling	Leonard F. Farrey	S-225
SS9-97	Federal & State Financial Assistance Programs for Schools	Robert W. Goss	S-314
SS9-910	Comparative Education	Ruth Griffiths	S-226
SS8-753	Advance Psychological Foundations of Education, Section A	Bernard J. Guarini	S-227
SS9-80	Analysis & Evaluation of Current Educational Problems	George T. Joseph	S-211
SS8-750	Foundations of Educational Psychology, Section A	Joseph C. Lonergan	S-205
SS8-914	Elements of Environmental Microbiology M,W,F, 9:55-11:10 T,Th 9:55-12:00	William K. Masterson	S-128
SS8-870	Principles of Organic Chemistry	Melvin Merken	S-301
SS8-90	School Law	Paul J. McCarron	S-228
SS8-450	Geography of World Economies	Rita M. L. Morris	A-214
SS8-551	Workshop in Modern Math for Elementary Teachers	Paul F. O'Neil	S-214
SS8-658	The United States since 1865	Francis G. Walett	A-315

No.	*Course Title*	*Instructor*	*Room*
THIRD PERIOD BEGINNING AT 11:20 A.M. DAILY			
SS8-70	Introduction to Audio-Visual Methods & Materials	Paul Davis	A-110
SS8-261	Art for the Classroom Teacher	Mary T. Dolphin	Art Rm
SS9-52	Research in Education, Section B	Alfred F. Eddy	S-217
SS8-83	Teaching Science in the Elementary Grades	Paul A. Holle	S-132
SS9-77	Elementary School Curriculum, Appraisal & Planning	George T. Joseph	S-211
SS8-250	History & Literature of Music	Abram Kaminsky	S-123
SS8-912	Methods & Materials in Teaching Special Classes	Joseph C. Lonergan	S-205
SS8-61	Principles & Practices in Guidance, Section A	Paul J. McCarron	S-228
SS8-270	Reference Sources & Methods, Part 1	Bernard L. McGough	G-24
SS9-866	Science Demonstration Workshop	Melvin Merken	S-301
SS8-449	Geographic Analysis of Some Crisis Regions of the World	Rita M. L. Morris	A-214
SS8-186	Essays of Our Times	Kathryn R. O'Donnell	G-23
SS8-778	Advance Philosophical Foundations of Education, Section B	Joseph W. Riordan	S-212
SS8-579	Modern Abstract Algebra	Evelyn Robinson	S-227

EVENING CLASSES

7:00 P.M. PERIOD MONDAYS, TUESDAYS, & THURSDAYS, 7:00—9:45 P.M.			
SS8-776	Introduction to Philosophical Foundations of Education, Section B	Walter Busam	S-228
SS8-186	Milton and His Contemporaries	Paul J. Edmunds	S-231
SS8-651	Europe in the Nineteenth Century	Edwin R. Hedman	S-126
SS8-754	Advance Psychological Foundations of Education, Section B	Bernard J. Guarini	S-227
SS8-62	Principles & Practices in Guidance, Section B	G. Flint Taylor	S-205
SS8-579	Advanced Calculus	Robert W. Redding	S-225
SS9-999	Intensive Teacher Preparation Workshop in Secondary Education 8:30 A.M.-2:30 P.M. 6 S.H.	Joseph P. Scannell	Chandler Street Jr. H. S.

Prospective enrollees must supply official transcripts confirming six credits in education as well as credits in their major fields on or before May 17, 1968.

Interviews with prospective registrants by Joseph P. Scannell by appointment.

COURSE DESCRIPTIONS

SS8-75 Curriculum for Early Childhood Education **3 sem. hrs.**

Attention in this course will be focused on the curriculum and the daily activities designed to enable young children to use their developmental powers to the fullest. Students will consider the ways and means by which the teacher creates an environment rich in learning opportunities, geared to the age-level characteristics of young children. Registration is limited to those interested in nursery and/or Kindergarten classes.

Daily at 8:30 A.M. Virginia Ball

SS9-71 **Techniques & Production of Instuctional Materials** **3 sem. hrs.**

This course is designed to enrich the teacher's classroom performance by developing techniques of visual presentation of subject materials. Pictorial presentations of instructional materials through non-artistic skills will be developed. The techniques apply at all levels of instruction, but the subject matter will be related to the specific interest of each teacher. Students will be expected to provide some of the materials consumed in producing the instructional materials.

Daily at 8:30 A.M. Paul Davis

SS9-51 **Research in Education, Section A** **3 sem. hrs.**

This course will stress the use of appropriate research methods in the selection and evaluation of data. It is designed to aid the graduate student in the preparation and understanding of research reports. Major areas of emphasis will include the nature of and criteria for evaluating research, library techniques and resources, selection and documentation, organization and format of a report, and necessary statistical concepts and methods of research. The student will be expected to demonstrate his knowledge of these in a term research study.

Prerequisite—A Bachelor's degree from an accredited college.

Daily at 8:30 A.M. Alfred F. Eddy

SS9-63 **Techniques in Counseling** **3 sem. hrs.**

This course is intended for teachers and others interested in guidance. Principles of counseling and the application of basic and advanced techniques to the counseling process will be included. Case studies and personal, educational, and vocational problems on the elementary, secondary, and college levels in counselor-situations will be presented.

Daily at 8:30 A.M. Leonard Farrey

SS8-477 **Social Problems of the School and Community** **3 sem. hrs.**

A course designed to explore the current social problems which confront school administrators. Examination of their causes, methods of prevention, and proposed solutions will be made. Among the topics to be examined are urban displacement, "de facto" segregation, delinquency, drug and alcohol abuses, and the violation of sexual mores. Resource consultants will be used extensively in this seminar-oriented course.

Daily at 8:30 A.M. Robert W. Goss

SS9-87 **Supervision in Today's Schools** **3 sem. hrs.**

This course is designed as an introductory course in supervision for teachers, school administrators, and supervisors at both the elementary and secondary school levels. Significant topics included

in the course are: concepts of supervision; principles of supervision; organization for supervision; group process; techniques of supervision; and the evaluation and improvement of instruction, curriculum, and the supervisory program. Opportunity will be provided for concentrated study and application of the materials of the course to elementary, secondary, or special subject work. This course, or its equivalent, is prerequisite for all advanced courses in supervision.
Daily at 8:30 A.M. Ruth Griffiths

SS8-873 **Animal World and its Evolution** 3 sem. hrs.

This course will include a survey of the animal kingdom, its evolution, and certain taxonomic considerations. The course will be directed towards expanding the background of those who have had a minimum of formal training in the biological sciences, and will be supplemented with appropriate audio-visual materials: demonstration, slides, movies, and examination of selected living and/or preserved specimens.
Daily at 8:30 A.M. Paul Holle

SS8-153 **Books & Related Materials for Jr. & Sr. High School Students** 3 sem. hrs.

This course is designed to provide teachers and librarians with a knowledge of the fundamental principles in evaulating and selecting books and related materials for young adults (grades 7-12), the standard review and selection sources, basic book collections for junior and senior high schools, handling controversial book problems, the sources for non-book materials. Emphasis will be placed on relating selection practices to the educational program of the modern secondary school. This course will satisfy, in part, the requirements for the public school librarian's certificate.
Daily at 8:30 A.M. William D. Joyce

SS8-82 **Teaching Music in the Elementary Grades** 3 sem. hrs.

The place of music in the elementary curriculum with emphasis placed upon the child voice, selection and presentation of rote songs and understandings needed by the classroom teacher for guiding growth in rhythms, notational, and listening experiences, survey of music books and materials, recordings, and other audio-visual materials used in the elementary school music program.
Daily at 8:30 A.M. Abram Kaminsky

SS8-775 **Introduction to Philosophical Foundations of Education, Section A** 3 sem. hrs.

Students in this course will make an intensive examination and critical evaluation of the major philosophies in Western culture which have given direction and meaning to educational theory and practice in the historical periods, including the Modern Era, in which they exerted major influence. The course is the equivalency

to undergraduate credits in both Philosophy and Philosophy of Education.
Daily at 8:30 A.M. William K. Masterson

SS8-179 The World in the Field of the Short Story 3 sem. hrs.

This course is designed to provide a study of the development of the short story as a literary form, and an analysis of its techniques through a study of examples from the works of world writers. Practice in interpretative analysis and critical evaluation is provided.
Daily at 8:30 A.M. Kathryn R. O'Donnell

SS8-81 Teaching Enriched Language Arts Units in Elementary Grades 3 sem. hrs.

Concentration will be upon those areas of the language program which call for a creative response from the pupils; namely, poetry, creative writing, reporting, and vocabulary building. Other areas would be included as the need arises. Motivation and planning using music, marionettes and puppets, tapes, and other innovative means will be demonstrated.
Daily at 8:30 A.M. Paul F. O'Neil

SS9-60 Laboratory Practicum in Remedial & Corrective Reading at Elementary Level 6 sem. hrs.

Study will be made of the symptoms and causes of reading disabilities and the procedures which may be used to aid in their correction. Each graduate student will be required to diagnose and analyze a pupil's reading difficulties through formal and informal testing procedures. A remedial program will be initiated and carried out for the pupils in a clinical setting. Cases will be from grades three through six. A case history of the remedial pupil will be required. This will include initial and final testing results along with the remedial techniques used. A double period time block will consist of a seminar on the diagnostic and corrective procedures, followed by a work period with the pupil under the supervision of the course instructor. Course prerequisites: 1. Three years teaching experience at the elementary level. 2. One basic course in the teaching of reading at the elementary school level. The course will carry six (6) semester hours graduate credit. Class size will be limited.
Daily at 8:30 A.M.-11:10 A.M. J. Francis O'Mara

SS9-777 Advanced Philosophy of Education, Section A 3 sem. hrs.

This course has the two-fold purpose of (1) studying and evaluating the contributions made by outstanding philosopher-educators both of the past but especially of the modern eras, and (2) analyzing the basic philosophical issues and problems in education and society and the alternatives posed by the different

philosophical systems and assumptions. The student is expected to read and analyze the original contributions of the major educational philosophers in order to determine to what extent a synthesis of viewpoint may be achieved.

Prerequisites: Undergraduate credits in both Philosophy and in Philosophy of Education or equivalency.
Daily at 8:30 A.M. Joseph W. Riordan

SS8-576 Mathematics for Junior High School Teachers 3 sem. hrs.

This course will attempt to give a sound background in, and a suitable explanation of, the structure of both arithmetic and algebraic concepts. Moreover, the material presented will give the student the background necessary for presenting many topics not found in the traditional curriculum but being recommended for inclusion in the early grades.
Daily at 8:30 A.M. Evelyn Robinson

SS8-656 The American Revolution and Early National Period 3 sem. hrs.

Students in this history course will make an intensive study of the age of the American Revolution, 1760-1789. Topics for study will include the Anglo-French struggle for empire, the new British colonial policy, causes of the Revolution, the struggle to establish federalism and the Constitution. Attention will be paid to different interpretations of the problems of the period and to original sources of evidence.
Daily at 8:30 A.M. Francis G. Walett

SS8-78 Special Problems of the School Beginner 3 sem. hrs.

This course is designed to acquaint teachers of young children with the various areas of concern—speech and language development, emotional problems, physical handicaps (problems of sight, hearing, cerebral palsy) intellectual limitations and social growth. Identification of children with problems in these areas and suggestions on how they can be handled in the classroom will be conducted in a seminar-type approach. Parent-teacher conferences on discussing the role of each responsible adult in handling the problem will be examined.
Daily at 9:55 A.M. Virginia Ball

SS8-263 Painting as a Creative Expression 3 sem. hrs.

A study of the representative schools of painting with particular attention to the many personal applications which this study would promote. Projects will include using the same techniques as the artists who are discussed. Students will be expected to provide some of the materials to be used.
Daily at 9:55 A.M. Jacqueline G. Casale

SS9-67 **Practicum in Counseling** 3 sem. hrs.

This course is designed to give advanced graduate students opportunity to put into practice the various theoretical aspects of academic counseling and guidance which they have learned in previous courses. Registration is restricted to those concentrating in Guidance who have completed 3 guidance courses including Techniques of Counseling. Students will review the major areas of counseling theory, they will be supervised while giving individual academic counseling to junior and senior high school students, finally they are aided in assessing the practice.
Daily at 9:55 A.M. Leonard Farrey

SS9-97 **Federal and State Financial Assistance Programs for Schools** 3 sem. hrs.

This program is designed to acquaint school officials (and potential officials) with the several avenues for acquiring financial aid for their school systems from both federal and state programs. Procedures and requirements involved in applying for, utilizing, and accounting for funds will be carefully examined.
Daily at 9:55 A.M. Robert W. Goss

SS9-910 **Comparative Education** 3 sem. hrs.

The purpose of this course is to give a broad overview of education in the major countries of the world. The social, economic and cultural background and influences will be reviewed in terms of educational programs and problems. Some time will be devoted to education in the developing countries. A brief comparison of American education with education in other countries will be made.
Daily at 9:55 A.M. Ruth Griffiths

SS8-753 **Advanced Psychological Foundations of Education, Section A** 3 sem. hrs.

In this course, class-members will study and evaluate the role of those environmental, mental and extra-mental forces which motivate all learners to utilize fully and effectively their capacities, aptitudes and attitudes. It includes a systematic analysis of the major schools of psychology with special attention focussed on the contemporary schools. Attention is given to the teachers' role in the learning process and special emphasis will be centered on the application of these principles to specific classroom situations.
Daily at 9:55 A.M. Bernard J. Guarini

SS9-80 **Evaluation & Analysis of Current Educational Problems** 3 sem. hrs.

The children being educated in our classrooms today will live half their lives during the 21st Century. Presently, our educational system is being revolutionized with new curriculum approaches:

educational television, team teaching, role playing techniques and new and creative approaches to design and development of school plant facilities. It will be the purpose of this course to dissect and closely examine these and other new approaches in education.
Daily at 9:55 A.M. George T. Joseph

SS8-750 Foundations of Educational Psychology **3 sem. hrs.**

This course covers the theoretical aspects of psychology for the classroom teacher. It includes a systematic analysis of the major schools of psychology and a study of the effects of heredity and environment. Reading in the following areas will be required: results of research on growth and development, theories of intelligence, concepts in measurement and evaluation, individual differences in capacity and achievement, and learning theory.
Daily at 9:55 A.M. Joseph C. Lonergan

SS8-914 Elements of Environmental Microbiology **3 sem. hrs.**

This course will include the principles of microbiology—primary concern being directed towards the intimate triad of host, environment, and parasite. Lecture and laboratory sessions will be directed towards the needs and interests of the educator, as well as those in allied fields, who wish to acquaint themselves in depth with the microorganisms which they may have encountered unwittingly or vicariously. Standard experiments in microbiology will be covered—including selected environmental applications (i.e. community, public facilities, school, home, etc.).
M. W. F. at 9:55 A.M.-11:10 A.M.
T. Th. at 9:55 A.M.-12:00 A.M. William K. Masterson

SS8-870 Principles of Organic Chemistry **3 sem. hrs.**

This course is designed for teachers of general science and biology as well as chemistry. Special emphasis will be placed upon electronic theory and molecular geometry. Standard laboratory operations and syntheses will be developed in the laboratory. A previous knowledge of general chemistry is desirable.
Daily at 9:55 A.M. Melvin Merken

SS9-90 School Law **3 sem. hrs.**

This course is designed to acquaint administrators and teachers with school laws affecting public education in the United States, with particular emphasis upon the state and community laws of Massachusetts. Attention will be given to such topics as legal status of school committees, contractual rights and obligations of teachers, the suspension and expulsion of pupils and school attendance.
Daily at 9:55 A.M. Paul J. McCarron

SS8-450 The Geography of World Economies **3 sem. hrs.**

The phenomenon of growth from a subsistence hunting-fishing economy to a sophisticated economy of exchange is the theme of the course. It will examine the geographic basis of such changes as they have occurred and are occurring among the developing and over-developed nations of the world. Attention will be given to the origins of the various types of world economies, the resource bases on which they function and the directions they are likely to take as well as some problems of future adjustment to changing resource bases.

Daily at 9:55 A.M. Rita M. L. Morris

SS8-551 Workshop in Modern Math for Elementary Teachers **3 sem. hrs.**

The purpose of this course is to give the student a fundamental understanding of the concepts and techniques of arithmetic. Of major interest to the prospective and in-service elementary teacher, the course presents the modern approach to elementary mathematics which concerns not only "how" but also "why" certain arithmetic operations are performed. The workshop format allows for Student participation in providing manipulative and other means for making plausible basic properties of the number system.

Daily at 9:55 A.M. Paul F. O'Neil

SS8-658 United States History, Post Civil War Period "The Rise of American Democracy" **3 sem. hrs.**

The material of this study, drawn from the history of the United States from 1865 to the end of the 20th century will be focussed on the completion of the continental area, the impact of the Industrial Revolution on American life, the waves of immigration and the attendant problems, and the growth of urbanization. Reports, the study of source materials and discussion of interpretive viewpoints will constitute the major assignments for students in this class.

Daily at 9:55 A.M. Francis G. Walett

SS8-70 Introduction to Audio-Visual Methods & Materials **3 sem. hrs.**

This is an introductory course for the classroom teacher in the utilization of all types of audio-visual materials for improving instruction. By means of lecture, discussion, and demonstration students will learn the criteria in selection of materials, planning for their use, evaluation of methods, advantages and limitations of various materials, and implications of research. Each class member learns the operation of mechanical equipment as well as sources of audio-visual materials for the various curricula.

Daily at 11:20 A.M. Paul Davis

SS8-261 Art for the Classroom Teacher 3 sem. hrs.

In this studio workshop students will enrich their experiences in dealing with the art materials, skills and techniques valuable to the classroom teacher. A combination lecture, informal discussion, and activity course will provide individual and group work in such areas as basic drawing, painting, lettering, and modeling. Exhibits, reproductions and slides will be used as enrichment material.
Daily at 11:20 A.M. Mary T. Dolphin

SS9-52 Research in Education, Section B 3 sem. hrs.

This course will stress the use of appropriate research methods in the selection and evaluation of data. It is designed to aid the graduate student in the preparation and understanding of research reports. Major areas of emphasis will include the nature of and criteria for evaluating research, library techniques and resources, selection and documentation, organization and format of a report, and necessary statistical concepts and methods of research. The student will be expected to demonstrate his knowledge of these in a term research study.
Prerequisite—A Bachelor's degree from an accredited college.
Daily at 11:20 A.M. Alfred F. Eddy

SS8-83 Teaching Science in the Elementary Grades 3 sem. hrs.

This course is designed to encourage and strengthen the teaching of science in the elementary (primary and intermediate) grades. Although the several methods of teaching will be stressed, including instructor and student demonstrations and experiments, the following additional areas will be explored: objectives and place of science in the elementary curriculum; techniques of helping children learn science; organization of a science program; and such special problems as obtaining, constructing, and using materials, the selection of texts and reference books, and availability of pertinent visual aids.
Daily at 11:20 A.M. Paul A. Holle

SS9-77 Elementary School Curriculum, Appraisal & Planning 3 sem. hrs.

The investigation of recent development in practices, materials of instruction and techniques, and unit and activity planning will be the general mood of this course. Emphasis will be placed on types of lessons, techniques of assignments and diagnostic procedures.
Daily at 11:20 A.M. George T. Joseph

SS8-250 History & Literature of Music 3 sem. hrs.

This course is designed to encourage greater enjoyment of music through understanding and discrimination. It is directed toward those who have had some or no formal training, but who wish to broaden their background in this area. Although not a methods

course, these materials should be useful professionally to both prospective and in-service teachers.
Daily at 11:20 A.M. Abram Kaminsky

SS8-912 **Methods & Materials in Teaching Special Classes** 3 sem. hrs.

This course will deal with the study of the development of experiences which will provide optimum conditions of growth for the mentally retarded child. Emphasis will be placed on the mental equipment of the individual children, different degrees of retardation and their causes, and disorders of behavior which frequently are concomitant. Types of curricula and organization of special classes will be considered. Major emphasis will be placed on language arts, quantitative thinking, and evaluative techniques. This course meets the requirements toward State Certification to teach a special class.
Daily at 11:20 A.M. Joseph C. Lonergan

SS8-61 **Principles & Practices in Guidance (Guidance 1), Section A** 3 sem. hrs.

This is an introductory course designed to provide the student with an understanding of the need, meaning, and scope of guidance services. The principles and practices involved in the following guidance areas will be considered: introduction and philosophy of guidance; understanding the individual and his needs; essential orientation activities for the student; collecting, recording, and evaluating data; interviewing and counseling; guidance through group activities; placement and follow-up activities; organization and evaluation of guidance. The emphasis of the course will be placed upon the role of the classroom teacher in the guidance program.

Note: This course or its equivalent is a prerequisite for all advanced courses in guidance.
Daily at 11:20 A.M. Paul J. McCarron

SS8-270 **Reference Sources & Methods, Part 1** 3 sem. hrs.

This library science course is designed to acquaint the student with the philosophy and technique of reference service. The content and use of the basic reference tools also will be covered. Students will use the college library reference problems.
Daily at 11:20 A.M. Bernard L. McGough

SS9-866 **Science Demonstration Workshop** 3 sem. hrs.

In this course, teachers will be assisted in developing a store of workable demonstrations and experiments which may be applied at the elementary and secondary levels. Materials will be drawn from the physicial and biological sciences, with particular emphasis on the newer curricula in these areas.
Daily at 11:20 A.M. Melvin Merken

SS8-449 Geographic Analysis of Some Crisis Regions of the World 3 sem. hrs.

The areas to be examined include the Mediterranean world, the Far East, the Caribbean and Latin American Region and the Central Southwestern and Southeastern Asian Regions. Attention will be given to the geographic bases for special problems which have evolved in these regions, and the common factors which may accentuate or exacerbate the problems. The role of the United States and the U.S.S.R. vis-a-vis each of these areas will be examined with a view to the easing of tensions in these areas.
Daily at 11:20 A.M. Rita M. L. Morris

SS8-186 Essays of Our Time 3 sem. hrs.

The modern essay is presented as a forceful, crusading, literary type in deciphering modern problems of living in our rapidly changing world. The writing techniques of outstanding essayists will be studied. Lectures, reports, critical evaluations.
Daily at 11:20 A.M. Kathryn R. O'Donnell

SS9-779 Advanced Philosophical Foundations of Education, Section B 3 sem. hrs.

This course has the two-fold purpose of (1) studying and evaluating the contributions made by outstanding philosopher-educators both of the past but especially of the modern eras, and (2) analyzing the basic philosophical issues and problems in education and society and the alternatives posed by the different philosophical systems and assumptions. The student is expected to read and analyze the original contributions of the major educational philosophers in order to determine to what extent a synthesis of viewpoint may be achieved.

Prerequisites: Undergraduate credits in both Philosophy and in Philosophy of Education or equivalency.
Daily at 11:20 A.M. Joseph W. Riordan

SS8-579 Modern Abstract Algebra 3 sem. hrs.

This course is designed as a first course in modern abstract algebra. Some of the topics to be discussed are rings, integral domains, fields, and groups.
Daily at 11:20 A.M. Evelyn Robinson

SS8-776 Introduction to Philosophical Foundations of Education, Section B 3 sem. hrs.

Students in this course will make an intensive examination and critical evaluation of the major philosophies in Western culture which have given direction and meaning to educational theory and practice in the historical periods, including the Modern Era, in which they exerted major influence. The course is the equivalency

to undergraduate credits in both Philosophy and Philosophy of Education.
Evenings: Mon., Tues., Thurs. at 7:00 P.M. Walter Busam

SS8-186 Milton and His Contemporaries 3 sem. hrs.

Milton's epic, drama, elegy, sonnets and major prose works will receive major consideration in this course. The other 17th-century writers (Donne, Jonson, Herbert, Vaughan, Crashaw, and Marvell) will be examined.
Evenings: Mon., Tues., Thurs. at 7:00 P.M. Paul J. Edmunds

SS8-651 Europe in the 19th Century 3 sem. hrs.

After a discussion of European society and government, and the issues bequeathed by the French Revolution, this course will take up the reorganization of Europe by Napoleon, the Vienna settlement, and the emergence of the great movements of liberalism and nationalism. It will conclude with the New Imperialism and the rise of Socialism in an Age of Realism.
Evenings: Mon., Tues., Thurs. at 7:00 P.M. Edwin R. Hedman

SS8-754 Advanced Psychological Foundations of Education, Section B 3 sem. hrs.

In this course, class-members will study and evaluate the role of those environmental, mental and extra-mental forces which motivate all learners to utilize fully and effectively their capacities, aptitudes and attitudes. It includes a systematic analysis of the major schools of psychology with special attention focussed on the contemporary schools. Attention is given to the teachers' role in the learning process and special emphasis will be centered on the application of these principles to specific classroom situations.
Evenings: Mon., Tues., Thurs. at 7:00 P.M. Bernard J. Guarini

SS8-62 Principles & Practices in Guidance (Guidance 1), Section B 3 sem. hrs.

This is an introductory course designed to provide the student with an understanding of the need, meaning, and scope of guidance services. The principles and practices involved in the following guidance areas will be considered: introduction and philosphy of guidance; understanding the individual and his needs; essential orientation activities for the student; collecting, recording, and evaluating data; interviewing and counseling; evaluation of guidance. The emphasis of the course will be placed upon the role of the classroom teacher in the guidance program.
Evenings: Mon., Tues., Thurs. at 7:00 P.M. G. Flint Taylor

SS8-579 Advanced Calculus V Concepts in Theoretical Calculus 3 sem. hrs.

Sets of points on the real line. Rigorous treatment of functions, limits, continuity, and uniform convergence. The Riemann inte-

gral. Improper integrals. Functions of several variables. (Permission of the instructor).
Evenings: Mon., Tues., Thurs. at 7:00 P.M. Robert Redding

SS9-999 Intensive Teacher Preparation Workshop in Secondary Education (Including observation, demonstration, and practice teaching classes) 6 sem. hrs.

The primary purpose of this program is to enable prospective secondary school teachers to meet the state certification requirements in student teaching.

Student teachers in this intensive program will meet five hours a day for six weeks. The class day will include demonstration teaching by master teachers and observation and practice teaching by the student teacher from 8:30 A.M. until noon. The secondary school pupils will be dismissed about noon, and formal classes, conferences, and preparations will be scheduled in the afternoon with the Coordinator and master teachers available for consultation and assistance.

Classes will be opened to a limited number of student teachers and admission to the program is selective. Admission to the program is restricted to those holding a bachelor's degree or who will receive the degree in June, 1968 and have had 30 semester hours in their major fields of mathematics, biology, physics, English or French plus six hours of education credits. The Coordinator may waive, in part, some of the prerequisites.

Applications for admission, accompanied by official transcripts of all courses taken beyond high school, must be received by the Director of the Program of Continuing Studies at Worcester State College not later than June 7, 1968. It should include a resume of your educational and teaching experience and identify the number of semester hours of credit in your major field(s). If it be deemed necessary, applicants might be invited to confer with the Coordinator prior to official acceptance into this Secondary Education Workshop.
Daily at 8:30 A.M.-2:30 P.M. Joseph P. Scannell
Coordinator

FOR FURTHER INFORMATION CONCERNING YOUR PROGRAM OF STUDY, CONTACT:

MR. CORNELIUS S. DONOGHUE, Director
Program of Continuing Studies
State College at Worcester
Worcester, Massachusetts 01602

or

MR. JOHN L. EAGER, Associate Director
Program of Continuing Studies
State College at Worcester
Worcester, Massachusetts 01602

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